Examiner

Group Art Unit: 2739

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE roup 2700

Applicant

: Stephen Palm

Appl. No.

: 09/473,683

Filed

: December 29, 1999

For

: ACTIVATION OF MULTIPLE xDSL MODEMS WITH

HALF DUPLEX PROCEDURES

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents Washington, DC 20231

Sir:

In accordance with the duty of disclosure under C.F.R. §1.56, §1.97-1.98, Applicant hereby calls the following document to the Examiner's attention:

A copy of an International Search Report in related International application PCT/US99/00519, mailed on April 20, 1999 is enclosed, in which the following documents were cited:

U.S. Patent 5,668,857 to McHALE was cited by the International Searching Authority as a category "X" document (indicating a document of particular relevance), with respect to claims 1-33 of the PCT application. The International Searching Authority indicated that Fig. 1, the Abstract and column 3, line 12 to column 13, line 10 are relevant;

U.S. Patent 5,781,617 to McHALE et al. was cited by the International Searching Authority as a category "X" document with respect to claims 1-33 of the PCT application. The International Searching Authority also indicated that this document is a category "P" document (indicating a document published prior to the international filing date of the PCT

application, but later than the claimed priority date) with respect to claims 1-33 of the PCT application. The International Searching Authority indicated that Fig. 1, the Abstract and column 3, line 12 to column 13, line 10 are relevant;

U.S. Patent 5,852,655 to McHALE et al. was cited by the International Searching Authority as a category "X" document and a category "P" document with respect to claims 1-33 of the PCT application. The International Searching Authority indicated that Fig. 1, the Abstract and column 1, line 58 to column 14, line 5 are relevant;

U.S. Patent 5,410,343 to CODDINGTON et al. was cited by the International Searching Authority as a category "A" document (indicating the state of the art), with respect to claims 1-33 of the PCT application. The International Searching Authority indicated that Figs. 2, 4 and 6, and the Abstract are relevant; and

U.S. Patent 5,757,803 to RUSSELL et al. was cited by the International Searching Authority as a category "A" document and a category "P" document with respect to claims 1-33 of the PCT application. The International Searching Authority indicated that Figs. 7 and 8, the Abstract, and column 3, lines 24-49 are relevant.

An International Search Report mailed on September 10, 1999 in related PCT Application PCT/US99/06986 is enclosed, in which the following documents were cited:

U.S. Patent No. 5,796,808 to SCOTT et al., which issued on August 18, 1998 was cited as a category "X" document and a category "E" document (i.e. an earlier document published on or after the international filing date) with respect to claims 1-12, 17, 18, 20-22, 31, and 35-38 of the PCT Application. The Examiner indicated that the Abstract, columns 3,6, and 7, lines 1-57, 18-64, and 13-31, respectively, are relevant:

U.S. Patent No. 5,751,914 to COLEY et al., which issued on May 12, 1998, was cited as a category "X" document and a category "P" document (i.e., a document published prior to the international filing date but later than the priority date claimed) with respect to claims 39-41 of the PCT Application. The Examiner indicated that columns 3 and 4, lines 42-67 and 7-5, respectively, are relevant;

U.S. Patent No. 5,448,566 to RICHTER et al., which issued on September 5, 1995, was cited as a category "X" document with respect to claim 31 of the PCT Application. The Examiner indicated that the Abstract is relevant;

U.S. Patent No. 5,163,131 to ROW et al., which issued on November 10, 1992, was cited as a category "X" document with respect to claims 39-41 of the PCT Application. The Examiner indicated that column 11, lines 34-45; column 24, lines 29-34; column 40, lines 20-42; column 44, lines 57-68; column 45, lines 33-41; and column 50, line 63 column 51, line 6 are relevant;

U.S. Patent No. 5,311,578 to BREMER et al., which issued on May 10, 1994, was cited as a category "X" document with respect to claims 1-4, 7-9, 31, 32, 36, and 37 of the PCT Application. The Examiner indicated that column 1, lines 10-37; column 2, lines 22-27; and column 3, lines 27-30 are relevant;

U.S. Patent No. 4,680,773 to AMUNDSON, which issued on July 14, 1987, was cited as a category "X" document with respect to claims 31, 33, and 35 of the PCT Application. The Examiner indicated that column 3, lines 35-62 are relevant;

U.S. Patent No. 5,463,661 to MORAN, III et al., which issued on October 31, 1995, was cited as a category "X" document with respect to claims 11-13, 15, 17-19, and 21

of the PCT Application. The Examiner indicated that column 4, lines 56-63; column 7, lines 3-33; column 9, lines 38-56; and column 11, lines 31-34 are relevant;

U.S. Patent No. 5,644,573 to BINGHAM et al., which issued on July 1, 1997, was cited as a category "X" document with respect to claims 11, 12, 17, 18, and 20 of the PCT Application. The Examiner indicated that column 11, lines 26-36 are relevant;

U.S. Patent No. 5,715,277 to GOODSON et al., which issued on February 3 1998, was cited as a category "X" document with respect to claims 11, 12, 17, 18, and 20 of the PCT Application. The Examiner indicated that column 2, line 64 - column 3, line 13; and column 3, lines 38-63 are relevant; and

U.S. Patent No. 5,608,764 to SUGITA et al., which issued on March 4, 1997, was cited as a category "X" document with respect to claim 23 of the PCT Application. The Examiner indicated that column 1, lines 13-25 are relevant.

A Notice of the Reason for the Rejection (Office Action), which issued on September 30, 1999, for related Japanese Patent Application No. HEI 11-3235, is enclosed, in which the following documents were cited:

U.S. Patent No. 5,903,608 to CHUN, which issued on May 11, 1999, entitled "Adaptive Bit Swapping Method And Device For Discrete Multitone System";

U.S. Patent No. 5,910,970, to LU, which issued on June 8, 1999, entitled "MDSL Host Interface Requirement Specification;

U.S. Patent No. 5,805,669 to BINGEL et al., which issued on September 8, 1998, entitled "Rate Adaptive Subscriber Line ("RADSL") Modem And Method Of Operation;

U.S. Patent No. 5,400,322 to HUNT et al., which issued on March 21, 1995, entitled

"Updating Of Bit Allocation In A Multicarrier Modulation Transmission System;

U.S. Patent No. 5,479,447 to CHOW et al., which issued on December 26, 1995, entitled "Method And Apparatus For Adaptive, Variable Bandwidth, High-Speed Data Transmission Of A Multicarrier Signal Over Digital Subscriber Lines"; and

An article published in the periodical, "Nikkei Communications," vol. 252, August 18, 1997, pages 80-89, along with an English translation of the relevant portion of the document is enclosed.

A copy of an Australian Patent Office Written Opinion mailed on February 2, 2000 with respect to related Singapore Application No. SG 9904001-6 is enclosed, in which the following documents are cited:

PCT Application WO 97/49229, along with English language family member U.S. Patent 5,796,808, was cited as disclosing the features of claims 1-12, 14-18, 20-22, 31 and 35-38;

- U.S. Patent 5,751,914 was cited as disclosing the features of claims 39-41;
- U.S. Patent 5,163,131 was cited as disclosing the features of claims 39-41;
- U.S. Patent 5,448,566 was cited as disclosing the feature of claim 31;
- U.S. Patent 5,311,578 was cited as disclosing the features of claims 1-4, 7-9, 31, 32 and 36-38;
 - U.S. Patent 4,680,773 was cited as disclosing the features of claims 31 and 33-35;
- U.S. Patent 5,463,661 was cited as disclosing the features of claims 11-13, 15, 17-19 and 21;
 - U.S. Patent 5,644,573 was cited as disclosing the features of claims 11, 12, 17, 18 and

20; and

U.S. Patent 5,715,277 was cited as disclosing the features of claims 11, 12, 17, 18 and

20.

A copy of each above-cited document is enclosed herewith for the review of the

Examiner, and as provided in M.P.E.P. §609. Further, the documents are listed on the

attached PTO-1449 Form. The Examiner is respectfully requested to consider each cited

document and to indicate such consideration by appropriately initialing the enclosed PTO-

1449 Form and returning a copy of the initialed form with the next communication.

The undersigned hereby certifies that each item of information contained in this

Supplemental Information Disclosure Statement was cited in a communication from a

foreign patent office in a counterpart foreign application not more than three months prior

to the filing of this statement. Thus, no fee is required to be paid in order to ensure

consideration of the submitted materials.

Should there be any questions, the Examiner is invited to contact the undersigned at

the below-listed number.

Respectfully submitted, Stephen PALM

Bruce H. Remeter

Reg. No. 29,027

March 30, 2000 GREENBLUM & BERNSTEIN, P.L.C. 1941 Roland Clarke Place Reston, VA 20191

(703) 716-1191

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